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EXAMINER

BORLINGHAUS, JASON M

ART UNIT	PAPER NUMBER
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3628

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/678,376

Applicant(s)

SINGH ET AL.

Examiner

Jason M. Borlinghaus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION***Claim Objections***

Claims 29 and 30 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

A proper dependent claim shall not conceivably be infringed by anything which would not also infringe the basic claim. See MPEP § 608.01(n), Section III. However, the depending Claims 29 and 30 recite "A computer for performing the method of Claim 1" and "A computer-readable medium having software for performing the method of Claim 1," respectively. Applying the infringement test, what is needed to infringe Claim 29 for example, a computer for performing the method of Claim 1. However, such a computer would not infringe the method steps of Claim 1 since the computer itself never performs any of the active steps required by the method. In other words, mere possession of such a computer would infringe Claim 29 but this is not enough to infringe Claim 1. As a result, Claims 29 and 30 are improper dependent claims.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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Claims 1 –14 and 16 –28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract that do not apply, involve, use, or advance the technological arts fail to promote the “progress of science and the useful arts” and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

As to technological arts recited in the preamble, mere recitation in the preamble or mere implication of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble.

In the present case, none of the recited steps are directed to anything in the technological arts as explained above with the exception of the recitation in the preamble that the method is “by employing at least one computer”. Looking at the claim as a whole, nothing in the body of the claim recites any structure or functionality to suggest that a computer performs the recited steps. Therefore, the preamble is taken to merely recite a field of use.

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Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, the claimed invention facilitates bartering of goods.

Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, Claims 1 – 10, 12 –14 and 16 –28 are deemed to be directed to non-statutory subject matter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 – 10, 12 – 15, 18, 26 – 31 and 33 – 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Himmelstein (US PG Pub. 2002/003878) in view of Tessler (Tessler, Joelle. *Swap Sites Expect Flood of*

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Unwanted Presents. Chicago Tribune. Chicago, Illinois. December 25, 2000. p.8)
and Mura (US PG Pub. 2004/0039677).

Regarding Claim 1, Himmelstein discloses a method for matching orders comprising:

- setting swap prices (barter value) for said products. (see abstract);
and
- matching units of said orders. ("The matching process functionally operates as a filter to display posted orders matching a selected criteria." - see page 4, paragraph 0039).

Himmelstein does not teach a method for matching orders comprising:

- the steps of receiving a plurality of orders from a plurality of participants to buy and/or sell a plurality of products, each order being a unilateral order from one of said participants identifying a number of units of said products to buy or sell; and
- matching units of said orders based on constrained net activity for said participants and said products to maximize a number of units matched to obtain matched orders and unmatched orders, said matching independent of said swap prices.

Tessler discloses a method for matching orders comprising:

- the steps of receiving a plurality of orders from a plurality of participants to buy and/or sell a plurality of products, each order being a unilateral order from one of said participants identifying a number of units of said products to buy or sell. ("Switchhouse works

by asking members to list the items they want and the items they have to swap, and then feeding this information into the SwitchCraft matching engine to produce suggested matches.” – While Tessler does not explicitly state the use of a unilateral order, Tessler does satisfy the definition as defined by applicant – “identifies a number of units of a single product to buy or sell.” In Tessler, a user does not link a buy order with a sell order, creating a bilateral order, but submits a list of separate buy and sell orders to be matched by the system);

- setting swap prices (SwapPoints) for said products. (“Sellers list items for a set number of points – with each point equal to about \$1 – and can then use the points from their sales to purchase what they want on the site); and
- matching orders based on constrained net activity for said participants and said products. (“The idea, as Ford put it, is ‘you put one in and take one out’.” – establishing that matching orders is constrained based upon SwapPoints within the system).

Tessler does not teach a method for matching orders comprising:

- matching units of said orders based on constrained net activity for said participants and said products to maximize a number of units matched to obtain matched orders and unmatched orders, said matching independent of said swap prices.

Mura discloses a method for matching orders comprising:

- matching orders to maximize a number of units matched to obtain matched orders and unmatched orders, said matching independent of said swap prices. ("In the case where the reserve price for every set of items is the sum of the reserve prices for the individual items it consists of, the system supplies an algorithm for maximizing the number of goods that are sold, given the constraint that the revenue obtained from the set of sold goods is at least as high as the reserve price for that set." – see page 5, paragraph 0058 – establishing the maximization of the number of units matched, independent of swap prices, as the algorithm maximizes the number of units matched and not does not maximize the revenue earned.)

It would have been obvious to one of ordinary skill at the time that the invention was made to have incorporated into Himmelstein the concept of constrained net activity, as illustrated by Tessler, and the concept of maximization of units matched, as disclosed by Mura, to maximize the number of units swapped through the bartering system.

Regarding Claim 2, Himmelstein discloses a matching system based on constrained net activity for said participants comprises:

- matching units of orders such that a number of units to buy for a participant equals a number of units to sell for said participant.
("The matching process functionally operates as a filter to display posted orders matching a selected criteria... The quantity of the

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selected item may also be used for filtering to require a direct quantity match or a match within a quantity range." - see page 4, paragraph 0039).

Regarding Claim 3, Himmelstein discloses a method wherein:

- said number of units to buy and said number of units to sell are weighted with weightings (barter value).

Neither Himmelstein, Tessler nor Mura teach a method wherein:

- said number of units to buy and said number of units to sell are weighted with non-unitary weightings.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified weightings to allow for any value for the weightings (unitary or non-unitary) that the inventor desired.

Regarding Claim 4, Himmelstein discloses a method wherein:

- said non-unitary (supra) weightings are based on said swap prices (barter value). (see abstract).

Regarding Claim 5, Himmelstein discloses a method wherein said matching based on constrained net activity for said products comprises:

- matching units of orders such that a number of units to buy for a product equals a total number of units to sell for said product. ("The matching process functionally operates as a filter to display posted orders matching a selected criteria...The quantity of the selected item may also be used for filtering to require a direct quantity match or a match within a quantity range." - see page 4, paragraph 0039).

Regarding Claim 6, Himmelstein discloses a method wherein said matching comprises:

- matching units of orders such that a number of units to buy and sell matches. ("The matching process functionally operates as a filter to display posted orders matching a selected criteria... The quantity of the selected item may also be used for filtering to require a direct quantity match or a match within a quantity range.") (see page 4, paragraph 0039).

Neither Himmelstein nor Tessler teach a method wherein said matching comprises:

- matching units of orders such that the number of units is maximized.

Mura discloses a method wherein said matching comprises:

- matching units of orders such that the number of units is maximized. ("In the case where the reserve price for every set of items is the sum of the reserve prices for the individual items it consists of, the system supplies an algorithm for maximizing the number of goods that are sold, given the constraint that the revenue obtained from the set of sold goods is at least as high as the reserve price for that set." – see page 5, paragraph 0058).

It would have been obvious to one of ordinary skill at the time that the invention was made to have incorporated into Himmelstein the concept of

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maximization of units matched, as disclosed by Mura, to maximize the number of units swapped through the bartering system.

Regarding Claim 7, Himmelstein discloses a method wherein:

- said number of units to buy and to sell is weighted with non-unitary weightings (barter value).

Neither Himmelstein, Tessler nor Mura teach a method wherein:

- said number of units to buy and said number of units to sell are weighted with non-unitary weightings.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified weightings to allow for any value for the weightings (unitary or non-unitary) that the inventor desired.

Regarding Claim 8, Himmelstein discloses a method wherein:

- said non-unitary (supra) weightings are based on said swap prices (barter value).

Regarding Claim 9, Himmelstein discloses a method wherein:

- said unilateral order (barter order) is irrespective of a price to buy or sell. (While Himmelstein does not explicitly state that the order is irrespective of price, Himmelstein does state that "...a barter order that includes the item to be traded, the item desired and additional parameters." - see page 3, paragraph 0030. Furthermore, Himmelstein states, "Other criteria such as market value and the other parameters identified in figs. 9A and 9B for each barter item may be displayed and used for matching. For example, where

barter value is required to be matched..." - see page 4, paragraph 0042. Himmelstein's statements indicate that unilateral orders could be established according to other additional parameters, irrespective of price.)

Regarding Claim 10, Himmelstein discloses a method wherein:

- at least one participant submits a plurality of unilateral orders (first class of items to be bartered and a second class of items to be acquired). (see abstract).

Regarding Claim 11, Himmelstein discloses a method wherein:

- said unilateral orders are received electronically via a network (Internet). (see figure 1).

Regarding Claim 12, Himmelstein discloses a method further comprising:

- the step of determining valuation differences for each participant based on said matched orders and said swap prices (barter value). (While Himmelstein does not explicitly state the determination of valuation differences, such determination is inherent in Himmelstein's statement that, "Using web barter dollars or cash simplifies the matching of barter orders where items of unequal value are traded." (see page 2, paragraph 0023).

Regarding Claim 13, Himmelstein discloses a method wherein:

- said matching occurs,

Neither Himmelstein, Tessler nor Mura teaches a method wherein:

- said matching comprises minimizing said valuation differences.

While Himmelstein does not explicitly state minimizing said valuation differences, it is well-known in the art that minimizing said valuation differences between items is a fundamental and basic component of matching items in a barter process.

Regarding Claim 14, Himmelstein discloses a method further comprising:

- notifying each participant having at least one matched order of said matched order (display matchers). (see figure 4D).

Regarding Claim 15, Himmelstein discloses a method wherein:

- each participant is notified electronically via a network (Internet). (see figure 1).

Regarding Claim 18, Himmelstein discloses a method wherein:

- said matching occurs after each order is received. (see figure 4D, 448).

Regarding Claim 26, Himmelstein discloses a method wherein:

- said prices are determined based on at least one of current market prices (available stock trading prices – see page 7, paragraph 0073), knowledge of said products (barter value – see abstract), and at least one financial model of said products (“Several ratio formulas, termed Himmelstein Value Ratios, are provided to assist the barterer.” – see page 7, paragraph 0074).

Regarding Claim 27, Himmelstein discloses a method further comprising:

- a set of swapping said matched orders and money to obtain swapped orders and swapped money. (see fig. 7C).

Regarding Claim 28, Himmelstein discloses a method wherein:

- said products comprise at least one of commodities, securities, financial contracts, money, and any combination thereof. (see page 1, paragraph 0007).

Regarding Claim 29, a computer for performing the method and is inherent in Himmelstein.

Regarding Claim 30, a computer-readable medium having software for performing the method and is inherent in Himmelstein.

Regarding Claim 31, further system claim would have been obvious from method claim rejected above in Claim 1 and is therefore rejected using the same art and rationale.

Regarding Claim 33 - 34, Himmelstein does not teach a method wherein:

- the unilateral orders from at least one participant are unable to be represented by at least one bilateral order; and
- the unilateral orders from one participant of said plurality of participants comprises a bucket of unilateral orders (a list) for said one participant, wherein said bucket of unilateral orders for said one participant is unable to be represented by at least one bilateral order for said participant.

Tessler discloses a method wherein:

- the unilateral orders from at least one participant are unable to be represented by at least one bilateral order. ("Switchouse works by asking members to list the items they want and the items they have

to swap, and then feeding this information into the SwitchCraft matching engine to produce suggested matches.” – In Tessler, a user does not link a buy order with a sell order, creating a bilateral order, but submits a list of separate buy and sell orders to be matched by the system. The concept of creating a list of buy orders and a list of sell orders would prevent the creation of a bilateral order as defined by applicant); and

- the unilateral orders from one participant of said plurality of participants comprises a bucket of unilateral orders (a list) for said one participant, wherein said bucket of unilateral orders for said one participant is unable to be represented by at least one bilateral order for said participant. (supra).

It would have been obvious to one of ordinary skill at the time that the invention was made to have incorporated into Himmelstein the concept of unilateral and buckets of unilateral orders, as illustrated by Tessler, to maximize the number of potential matches between bartering parties.

Claims 16 – 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Himmelstein, Tessler and Mura, as in Claim 1, in view of Nymeyer (US Patent 3,581,072).

Regarding Claim 16, Himmelstein does not teach a method wherein:

- said matching occurs after expiration of a period for receiving orders.

Nymeyer discloses a method wherein:

- said matching (traded) after expiration of a period for receiving orders (order period). (see col. 12, lines 67 – 77).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Himmelstein, Tessler and Mura by incorporating a period in which to receive orders, as was done by Nymeyer, to allow for a closed set of orders to be matched, allowing for optimal matching between orders.

Regarding Claim 17, Himmelstein discloses a method wherein:

- orders include unmatched orders (residual amounts) from said period. (see page 9, paragraph 104).

Himmelstein does not teach a method, further comprising:

- a next period for receiving orders, said next period occurring after said matching.

Nymeyer discloses a method, further comprising:

- a next period (new order period) for receiving orders, said next period occurring after said matching. (see col. 12, lines 67 – 77).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Himmelstein, Tessler and Mura's ability to match unmatched orders with the Nymeyer's structure of numerous periods to allow for repeated attempts to match unmatched orders.

Claims 19 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Himmelstein, Tessler and Mura, as in Claim 1 above, in view of Katz (US PG Pub. 2002/0178077).

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Himmelstein discloses a method for matching orders.

Neither Himmelstein, Tessler nor Mura teach a method wherein:

- the matching uses linear programming; and
- the matching uses quadratic or higher-order programming.

Katz discloses a method wherein:

- the matching (optimization) uses linear programming. (see page 8, paragraph 082); and
- matching (optimization) uses quadratic programming. (see page 8, paragraph 082).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed Himmelstein, Tessler nor Mura's method for matching orders with linear and quadratic programming, as was done in Katz, to allow for the optimal match to be located from the user-defined constraints, an objective function bound by maximum and minimum variables.

Claims 21 – 22 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Himmelstein, Tessler and Mura, as in Claim 1 and 31 above, and in further view of Keith (US PG Pub. 2001/0042040).

Himmelstein does not teach a method further comprising:

- a step of determining a priority for each order;
- said matching further comprises matching of units of said orders based on priorities of said orders; and
- said matching further comprises matching of units of said orders based on priorities of said orders.

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Keith discloses a method further comprising:

- a step of determining a priority for each order. (see page 3, paragraph 0052 and page 14, paragraph 0238);
- said matching (pairing) further comprises matching of units of said orders based on priorities of said orders. ("...by giving such party superior priority in pairing with the best contra side order.") (see page 14, paragraph 0238); and
- said matching (pairing) further comprises matching of units of said orders based on priorities of said orders. ("...by giving such party superior priority in pairing with the best contra side order.") (see page 14, paragraph 0238).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Himmelstein, Tessler and Mura to incorporate the ability to prioritize orders, as was done in Keith, to prove another methodology by which to match orders.

Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Himmelstein, Tessler, Mura and Keith, as applied to Claim 22 above, and further in view of Katz (Patent Pub. US 2002/0178077 A1).

Himmelstein discloses a method of matching orders.

Neither Himmelstein, Tessler, nor Mura teach a method wherein:

- said matching uses quadratic or higher-order programming; and
- said matching used iterative linear programming to match orders having higher priority over orders having lower priority.

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Keith discloses a method wherein:

- said matching (pairing) match orders having higher priority over orders having lower priority. ("...by giving such party superior priority in pairing with the best contra side order.") (see page 14, paragraph 0238).

Katz discloses a method wherein:

- the matching (optimization) uses quadratic programming. (see page 8, paragraph 082); and
- the matching (optimization) uses linear programming. (see page 8, paragraph 082).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed Himmelstein and Keith's method for matching orders with quadratic and linear programming, as was done in Katz, to allow for the optimal match to be located with the minimum variance between the matched orders.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Himmelstein, Tessler, Mura, Keith and Katz, as applied to Claim 24 above, and further in view of Lange (US 2003/0236738 A1).

Himmelstein and Keith disclose a method of matching.

Neither Himmelstein, Tessler, Mura nor Keith disclose a method wherein:

- said matching uses heuristics to hot start or cold start iterations of said iterative linear programming.

Katz discloses a method wherein:

- the matching (optimization) uses linear programming. (see page 8, paragraph 082).

Lange discloses a method wherein:

- said matching (calculating equilibrium) uses heuristics to hot start or cold start iterations. ("This equilibrium is calculated using the last equilibrium prices and fills as the initial starting point. This is referred to as "hot starting" the equilibrium calculation, which is significantly faster than resetting all the order fills to 0 and recalculating the equilibrium each time new orders are processed (cold start)." - see page 174, paragraph 2571).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed Himmelstein, Tessler, Mura and Keith's method for matching orders with linear programming, as was done in Katz, to allow for the optimal match to be located from the user-defined constraints, an objective function bound by maximum and minimum variables. Furthermore, it would have been obvious to allow for hot start or cold start iterations, as was done in Lange, to increase the speed at which matching takes place.

Response to Arguments

Applicant's arguments filed February 17, 2005 have been fully considered but they are not persuasive. Arguments not addressed in the following section are considered moot in view of new grounds for rejection.

Regarding the infringement test, in the previous office action, the examiner stated that Claims 29 and 30 were improper dependent claims as

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Claims 29 and 30 could conceivably be infringed upon without also infringing the base claim, Claim 1. To counter examiner's objection, applicant cites § 608.01

(n) that states:

The fact that the independent and dependent claims are in different statutory classes does not, in itself, render the latter improper. Thus, if claim 1 recites a specific product, a claim for the method of making the product of claim 1 in a particular manner would be a proper dependent claim since it could not be infringed without infringing claim 1. Similarly, if claim 1 recites a method of making a product, a claim for a product made by the method of claim 1 could be a proper dependent claim.

However, the applicant failed to consider the final sentence of that above paragraph that states:

On the other hand, if claim 1 recites a method of making a specified product, a claim to the product set forth in claim 1 would not be a proper dependent claim **>since it is conceivable that the product claim can be infringed without infringing the base method claim if the product can be made by a method other than that recited in the base method claim<.

In the instant case, a person could infringe Claims 29 ("a computer for performing the method of claim 1") and 30 ("a computer-readable medium having software for performing the method of claim 1") while not infringing Claim 1 (the method), itself. For example, a person could have a computer and software located on his desk capable of performing the method as claimed in Claim 1, but that technology, although capable of performing the method, was not actually utilized in the performance of the method of Claim 1. That person could conceivably perform the method by other means, such as by pencil and paper. However, since the person possessed "a computer" and "computer-readable medium" for performing the method, although not used in the actual performance of the method, that user would be infringing upon Claims 29 and 30 but not Claim 1.

Regarding §101 rejection, in the previous action, the examiner stated that Claims 1-10, 12-14 and 16-28 were rejected under § 101 as

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not applying, involving or advancing the technological arts. To counter examiner's rejection, applicant incorporated the phrase "by employing at least one computer" into the preamble of Claim 1. Unfortunately, this insertion into the preamble is insufficient and reasoning for this insufficiency is listed in the above §101 rejection.

Regarding unilateral orders, in the applicant's response to the examiner's previous action, the applicant differentiates his bartering system from prior art based upon the use of "unilateral orders" rather than the traditional "bilateral orders." Applicant cited his earlier specification (page 9, paragraph 55) which states:

A unilateral order identifies a number of units of a product to buy or sell. The unilateral order of the invention is distinguished from the bilateral order in conventional barter systems. A bilateral order identifies a number of units of a first product to sell in exchange for a number of units of a second product to buy, whereas a unilateral order identifies a number of units of a single product to buy or sell.

However, examiner asserts that applicant's bartering system still utilizes a "bilateral order" and that the use of the term "unilateral order" is a misnomer. Applicant asserts that his bartering system operates under a premise of "constrained net activity" which is defined in the specification (page 18, paragraph 0082) as follows:

As a constraint on the matching in this example, although a participant is permitted to submit orders totaling an unequal number of units to sell and to buy, the matching routine only matches an equal number of units to sell and to buy for each participant, where the units can be for a variety of different products. As a further constraint on the matching in this example, the matching routine only matches an equal number of units to sell and to buy for each product, where the units can be for a variety of different participants.

As a user of the bartering system cannot buy units from the system without selling units into the system, the orders submitted by the user even if termed "unilateral orders" are de facto "bilateral orders." A true unilateral order would allow users to buy or sell units without having to

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compensate the system from the opposing side to maintain equilibrium within the system.

Merely considering a "bilateral order" as two halves or two "unilateral orders" does not create two "unilateral orders." *Nerwin v. Erlichman* (168 USPQ 177, 179) states that constructing a formerly integral structure in various elements involves only routine skill in the art and, therefore, examiner asserts that dividing a "bilateral order" into multiple "unilateral orders" does not create a "unilateral order."

Examiner believes that applicants barter system utilizes a "bilateral order", although possibly a "bilateral order" possessing multiple possible combinations. In example, a user could offer to sell product A but is willing to purchase product B or product C, or some combination of them both. This is still a "bilateral order" in that the order has a sell portion and a buy portion, although not linked by a direct one-for-one relationship.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references cited to (Terrell, Kenneth. *These Swap Sites Are The Digital Age's Answer To Yesterday's Garage Sales*. *US News & World Report*. Washington, DC. vol. 130, iss. 1. January 8, 2001. p. 50) and (Kirby, Carrie. *Wanna Swap?: Sites let consumers trade CDs, videos, tickets and used goods online – but barriers remain*. *San Francisco Chronicle*. San Francisco, California. March 2, 2000. p C1) and these references are considered


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to be relevant to the claimed invention due to their reference to bartering systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Borlinghaus whose telephone number is (703) 308-9552. The examiner can normally be reached on 8:30am-5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on (703) 308-0505. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


PRIMARY EXAMINER
Au 3628